

--Table 1: Coding Table

AMINO ACID	CODON 1	CODON 2	CODON 3	CODON 4	CODON 5	CODON 6
Phe	UUU	UUC				
Ser	UCU	UCC	UCA	UCG	AGU	AGC
Tyr	UAU	UAC				
Cys	UGU	UGC				
Stop	UAA	UAG	UGA			
Trp	UGG					
Leu	UUA	UUG	CUU	CUC	CUA	CUG
Pro	CCU	CCC	CCA	CCG		
His	CAU	CAC				
Gln	CAA	CAG				
Arg	CGU	CGC	CGA	CGG	AGA	AGG
Ile	AUU	AUC	AUA			
Thr	ACU	ACC	ACA	ACG		
Asn	AAU	AAC				
Lys	AAA	AAG				
Met	AUG					
Val	GUU	GUC	GUA	GUG		
Ala	GCU	GCC	GCA	GCG		
Asp	GAU	GAC				
Gly	GGU	GGC	GGA	GGG		
Glu	GAA	GAG				

IN THE CLAIMS:

Please amend the claims as follows:

1. (Twice Amended) An isolated nucleic acid which comprises a polynucleotide derived from a plant selected from the group consisting of soybean, *Chenopdiaceae* plants and *Cruciferea* plants, said polynucleotide having a nucleotide

sequence hybridizable with a nucleotide sequence selected from the group consisting of:

(a) a nucleotide sequence encoding the amino acid sequence as depicted in SEQ ID NO: 1,

(b) a nucleotide sequence as depicted in SEQ ID NO: 2,

(c) a nucleotide sequence encoding the amino acid sequence as depicted in SEQ ID NO: 3,

{ 2 (d) a nucleotide sequence depicted by the 236th to 2584th nucleotides in the nucleotide sequence as depicted in SEQ ID NO: 4,

(e) a nucleotide sequence encoding the amino acid sequence as depicted in SEQ ID NO: 5,

SUB F1
cont (f) the nucleotide sequence depicted by the 134th to 2467th nucleotides in the nucleotide sequence as depicted in SEQ ID NO: 6,

(g) a nucleotide sequence encoding the amino acid sequence as depicted in SEQ ID NO: 7,

under conditions equivalent to 42°C to 68°C in a buffer comprising 0.9M NaCl 0.09M citric acid, and encoding a protein that binds a D-galactosyl group through the α (1 \rightarrow 6) bond to the hydroxyl group attached to the carbon atom at 6-position of the D-glucose residue in a sucrose molecule to form raffinose.

2. (Twice Amended) An isolated nucleic acid comprising a nucleotide sequence encoding the amino acid sequence as depicted in SEQ ID NO: 1.

3. (Twice Amended) An isolated nucleic acid comprising the nucleotide sequence as depicted in SEQ ID NO: 2.

4. (Twice Amended) An isolated nucleic acid comprising a nucleotide sequence encoding the amino acid sequence as depicted in SEQ ID NO: 3.

5. (Twice Amended) An isolated nucleic acid comprising the nucleotide sequence depicted by the 236th to 2584th nucleotides in the nucleotide sequence as depicted in SEQ ID NO: 4.

6. (Twice Amended) An isolated nucleic acid comprising a nucleotide sequence encoding the amino acid sequence as depicted in SEQ ID NO: 5.

7. (Twice Amended) An isolated nucleic acid comprising the nucleotide sequence depicted by the 134th to

2467th nucleotides in the nucleotide sequence as depicted in SEQ ID NO: 6.

8. (Twice Amended) An isolated nucleic acid comprising a nucleotide sequence encoding the amino acid sequence as depicted in SEQ ID NO: 7.

9. (Twice Amended) An isolated nucleic acid comprising the nucleotide sequence depicted by the 1st to 1719th nucleotides in the nucleotide sequence as depicted in SEQ ID NO: 8.

10. (Twice Amended) An isolated nucleic acid comprising the nucleotide sequence as depicted in SEQ ID NO: 4, SEQ ID NO: 6, or SEQ ID NO: 8.

17. (Twice Amended) A vector comprising the nucleic acid of claim 1.

18. (Twice Amended) A transformant, wherein the nucleic acid of claim 1 is introduced into a host cell.

23. (Twice Amended) A method for producing a raffinose synthase which comprises the steps of:

94
culturing or growing the transformant of claim 18 to produce the raffinose synthase, and
collecting the raffinose synthase.

30. (Amended) The isolated nucleic acid which comprises a polynucleotide derived from a plant selected from the group consisting of soybean, *Chenopdiaceae* plants and *Cruciferea* plants, said polynucleotide having a nucleotide sequence hybridizable with a nucleotide sequence selected from the group consisting of:

95
(a) a nucleotide sequence encoding the amino acid sequence as depicted in SEQ ID NO: 1,

(b) a nucleotide sequence as depicted in SEQ ID NO: 2,

SUP F2) (c) a nucleotide sequence encoding the amino acid sequence as depicted in SEQ ID NO: 3,

(d) a nucleotide sequence depicted by the 236th to 2584th nucleotides in the nucleotide sequence as depicted in SEQ ID NO: 4,

(e) a nucleotide sequence encoding the amino acid sequence as depicted in SEQ ID NO: 5,

(f) the nucleotide sequence depicted by the 134th to 2467th nucleotides in the nucleotide sequence as depicted in SEQ ID NO: 6, and

(g) a nucleotide sequence encoding the amino acid sequence as depicted in SEQ ID NO: 7,

under conditions equivalent to 65°C to 68°C in a buffer comprising 0.9M NaCl 0.09M citric acid, and encoding a protein that binds a D-galactosyl group through the α (1 \rightarrow 6) bond to the hydroxyl group attached to the carbon atom at 6-position of the D-glucose residue in a sucrose molecule to form raffinose.